

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (Previously Presented) Device for storage and conveyance of bulky holders (C), comprising at least one tier (32), each tier comprising at least one conveyance circuit (2) for the holders (C), and each conveyance circuit (2) comprising at least two longitudinal paths (4,6) disposed substantially parallel to each other, for conveyance of the holders (C) in the direction of the longitudinal paths (4,6) which longitudinal paths (4,6) each define a first predetermined number (N) of adjoining holder positions for the holders (C), while two adjacent longitudinal paths (4,6) of said conveyance circuit (2) slope in opposite directions at fixed angles, further comprising transverse tracks situated at the opposite ends of the longitudinal paths and movable at least in the vertical direction, for conveyance of the holders (C) in the direction of the transverse tracks, which transverse tracks can transfer the holders (C) to and from the longitudinal paths (4,6), and further comprising a second predetermined number ($M \leq 2 \cdot N - 1$) of carriers (14) which are movable along the longitudinal paths and transverse tracks and are designed to take one or more holders (C), lifting means (34) being provided for moving the transverse tracks in the vertical direction.

Claim 2 (Original) Device according to claim 1, in which the carriers (14) are provided with rows of wheels (16) which are spaced apart and are rotatable in the longitudinal direction of the longitudinal paths (4,6).

Claim 3 (Original) Device according to claim 2, in which at least end sections of the longitudinal paths (4,6) comprise guides (28) for guiding the wheels (16) of the carrier (14), open spaces (30) being present between the guides (28).

Claim 4 (Previously Presented) Device according to claim 1, in which the transverse tracks are formed by rotatable discs (40) which are disposed one after the other in rows and

Application Serial No. 10/031,850
Amdt. dated August 3, 2004
Reply to Office Action of February 19, 2004

are rotatable about a horizontal shaft (42) and in the longitudinal direction of a transverse track.

Claim 5 (Original) Device according to claim 4, in which a rotatable disc (40) is fixed on the head (36) of a piston/cylinder assembly (34).

Claim 6 (Previously Presented) Device according to claim 4, wherein an underside of a carrier (14) includes a row of wheels (16), and provided between said wheels are guides (44) for accommodating and guiding the rotatable discs (40).

Claim 7 (Previously Presented) Device according to claim 1, in which the carriers (14) are provided with spacers (46).

Claim 8 (Previously Presented) Device according to claim 1, in which the longitudinal paths (4, 6) are provided with blocking means (48) for retaining a carrier (14).

Claim 9 (Previously Presented) Device according to claim 1, provided with a supply point (12) and removal point (10) for feeding in and removing containers (C) respectively.

Claim 10 (Previously Presented) Device according to claim 1, in which the supply point (12) and removal point (10) are situated at the same end of the longitudinal paths (4, 6) of the device.

Claim 11 (Previously Presented) Device according to claim 1, in which the supply point (12) and removal point (10) are situated at the end of the longitudinal paths (4, 6) where the height difference between them is minimal.

Claim 12 (Previously Presented) Device according to claim 1, in which a detection system for detecting a unique code is present, which code (C_n) is placed on a holder (C).

Application Serial No. 10/031,850
Amdt. dated August 3, 2004
Reply to Office Action of February 19, 2004

Claim 13 (Previously Presented) Device according to claim 1, in which each conveyance circuit (2) comprises two parallel longitudinal paths (4, 6), and each tier (32) comprises several conveyance circuits (2) disposed next to each other.

Claim 14 (Cancelled)

Claim 15 (Previously Presented) Device according to claim 1, in which the second predetermined number (M) of carriers (14) movable along the longitudinal paths and transverse tracks is equal to twice the first predetermined number (N) of holder positions of a longitudinal path (4, 6) adjoining each other, minus one.

Claim 16 (Previously Presented) Device according to claim 1, wherein there are at least two conveyance circuits positioned adjacent to each other or in tiers to form a container terminal.

Claim 17 (Previously Presented) Device according to claim 1, wherein each longitudinal path slopes at an angle of approximately 0.2 degrees.

Claim 18 (Currently Amended) Device for storage and conveyance of bulky holders (C), comprising at least one tier (32), each tier comprising at least one conveyance circuit (2) for the holders (C), and each conveyance circuit (2) comprising at least two longitudinal paths (4,6) disposed substantially parallel to each other, for conveyance of the holders (C) in the direction of the longitudinal paths (4,6) which longitudinal paths (4,6) each define a first predetermined number (N) of adjoining holder positions for the holders (C), while two adjacent longitudinal paths (4,6) of said conveyance circuit (2) slope in opposite longitudinal directions at fixed angles and further comprising transverse tracks situated at the opposite ends of the longitudinal paths and movable at least in the vertical direction, for conveyance of the holders (C) in the direction of the transverse tracks, which transverse tracks can transfer the holders (C) to and from the longitudinal paths (4,6), and also further comprising a second

predetermined number ($M \leq 2 * N - 1$) of carriers (14) which are movable along the longitudinal paths and transverse tracks and are designed to take one or more holders (C), lifting means (34) being provided for moving the transverse tracks in the vertical direction.

Claim 19 (Previously Presented) Device according to claim 18, in which the carriers (14) are provided with rows of wheels (16) which are spaced apart and are rotatable in the longitudinal direction of the longitudinal paths (4,6).

Claim 20 (Previously Presented) Device according to claim 19, in which at least end sections of the longitudinal paths (4,6) comprise guides (28) for guiding the wheels (16) of the carrier (14), open spaces (30) being present between the guides (28).

Claim 21 (Previously Presented) Device according to claim 18, in which the transverse tracks are formed by rotatable discs (40) which are disposed one after the other in rows and are rotatable about a horizontal shaft (42) and in the longitudinal direction of a transverse track.

Claim 22 (Previously Presented) Device according to claim 21, in which a rotatable disc (40) is fixed on the head (36) of a piston/cylinder assembly (34).

Claim 23 (Previously Presented) Device according to claim 21, wherein an underside of a carrier (14) includes a row of wheels (16), and provided between said wheels are guides (44) for accommodating and guiding the rotatable discs (40).

Claim 24 (Previously Presented) Device according to claim 18, in which the carriers (14) are provided with spacers (46).

Claim 25 (Previously Presented) Device according to claim 18, in which the longitudinal paths (4, 6) are provided with blocking means (48) for retaining a carrier (14).

Claim 26 (Previously Presented) Device according to claim 18, provided with a supply point (12) and removal point (10) for feeding in and removing containers (C) respectively.

Claim 27 (Previously Presented) Device according to claim 18, in which the supply point (12) and removal point (10) are situated at the same end of the longitudinal paths (4, 6) of the device.

Claim 28 (Previously Presented) Device according to claim 18, in which the supply point (12) and removal point (10) are situated at the end of the longitudinal paths (4, 6) where the height difference between them is minimal.

Claim 29 (Previously Presented) Device according to claim 18, in which a detection system for detecting a unique code is present, which code (C_n) is placed on a holder (C).

Claim 30 (Previously Presented) Device according to claim 18, in which each conveyance circuit (2) comprises two parallel longitudinal paths (4, 6), and each tier (32) comprises several conveyance circuits (2) disposed next to each other.

Claim 31 (Previously Presented) Device according to claim 18, in which the second predetermined number (M) of carriers (14) movable along the longitudinal paths and transverse tracks is equal to twice the first predetermined number (N) of holder positions of a longitudinal path (4, 6) adjoining each other, minus one.

Claim 32 (Previously Presented) Device according to claim 18, wherein there are at least two conveyance circuits positioned adjacent to each other or in tiers to form a container terminal.

Claim 33 (Previously Presented) A device according to claim 18, wherein each longitudinal path slopes at an angle of approximately 0.2 degrees.

Claim 34 (Previously Presented) Device for storage and conveyance of bulky holders (C), comprising:

at least one tier (32), each tier having at least one conveyance circuit (2) for the holders (C), and each conveyance circuit (2) comprising at least two longitudinal paths (4,6) disposed substantially parallel to each other, for conveyance of the holders (C) in the direction of the longitudinal paths (4,6) which longitudinal paths (4,6) each define a first predetermined number (N) of adjoining holder positions for the holders (C), while two adjacent longitudinal paths (4,6) of said conveyance circuit (2) slope from the same end in opposite directions;

transverse tracks situated at the opposite ends of the longitudinal paths and movable at least in the vertical direction, for conveyance of the holders (C) in the direction of the transverse tracks, which transverse tracks can transfer the holders (C) to and from the longitudinal paths (4,6);

a second predetermined number ($M \leq 2 * N - 1$) of carriers (14) which are movable along the longitudinal paths and transverse tracks and are designed to take one or more holders (C), lifting means (34) being provided for moving the transverse tracks in the vertical direction, said carriers (14) are provided with rows of wheels (16) which are spaced apart and are rotatable in the longitudinal direction of the longitudinal paths (4,6); and

at least end sections of the longitudinal paths (4,6) have guides (28) for guiding the wheels (16) of the carrier (14), open spaces (30) being present between the guides (28).

Claim 35 (Previously Presented) Device for storage and conveyance of bulky holders (C), comprising:

at least one tier (32), each tier having at least one conveyance circuit (2) for the holders (C), and each conveyance circuit (2) comprising at least two longitudinal paths (4,6) disposed substantially parallel to each other, for conveyance of the holders (C) in the direction of the longitudinal paths (4,6) which longitudinal paths (4,6) each define a first predetermined number (N) of adjoining holder positions for the holders (C), while two

adjacent longitudinal paths (4,6) of said conveyance circuit (2) slope from the same end in opposite directions;

transverse tracks having rotatable discs (40) which are disposed one after the other in rows and are rotatable about a horizontal shaft (42) and in the longitudinal direction of a transverse track, said transverse tracks situated at the opposite ends of the longitudinal paths and movable at least in the vertical direction, for conveyance of the holders (C) in the direction of the transverse tracks, which transverse tracks can transfer the holders (C) to and from the longitudinal paths (4,6);

a second predetermined number ($M \leq 2 \cdot N - 1$) of carriers (14) which are movable along the longitudinal paths and transverse tracks and are designed to take one or more holders (C), and a lifting means (34) being provided for moving the transverse tracks in the vertical direction, wherein an underside of a carrier (14) includes a row of wheels (16), and provided between said wheels are guides (44) for accommodating and guiding the rotatable discs (40).